Electronic TUBE
KEN-RAD

12SG7
Description and Rating
RADIO-FREQUENCY-AMPLIFIER PENTODE

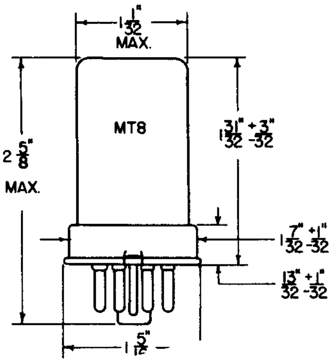
GENERAL DESCRIPTION

Principal Application: The type 12SG7 is a semi-remote cut-off amplifier pentode designed for use as a high gain radio-frequency or intermediate-frequency amplifier. The dual cathode connection provides a method for reducing undesirable coupling between cathode circuits.

Cathode:	Coated Unipotential
Heater Voltage (A-C or D-C)	12.6 Volts
Heater Current	0.15 Ampere
Envelope:	MT-8 Metal Shell
Base:	B8-21 Small Wafer Octal 8-Pin, Phenolic

Mounting Position:	Any
Direct Interelectrode Capacitances: *	
Grid to Plate (Max)	0.003 μμf
Input	8.5 μμf
Output	7.0 μμf

PHYSICAL DIMENSIONS

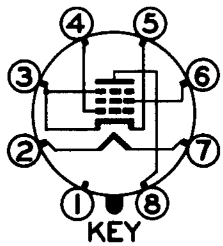


RMA 8-1

TERMINAL CONNECTIONS

Pin 1 - Shell and Internal Shield
Pin 2 - Heater
Pin 3 - Cathode and Grid Number 3
Pin 4 - Grid Number 1
Pin 5 - Cathode
Pin 6 - Grid Number 2 (Screen)
Pin 7 - Heater
Pin 8 - Plate

BASING DIAGRAM



RMA 8BK
BOTTOM VIEW

MAXIMUM RATINGS

	Design Center	Absolute	
Plate Voltage	300	330	Volts
Screen (Grid Number 2) Voltage	200	220	Volts
Screen Supply Voltage	300	330	Volts
Control Grid Bias Voltage	Never Positive		
Plate Dissipation	3.0	3.3	Watts
Screen Dissipation	0.60	0.66	Watt
D-C Heater-Cathode Voltage	90	100	Volts

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A AMPLIFIER

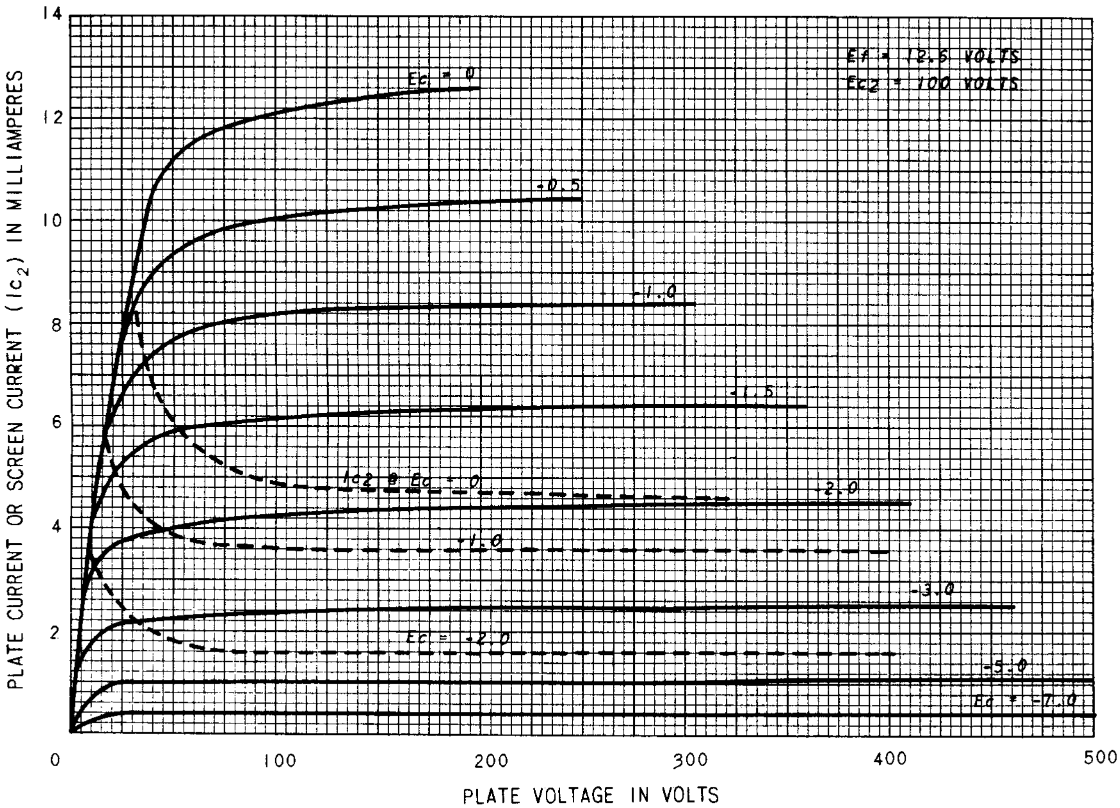
Heater Voltage	12.6	12.6	12.6	Volts
Plate Voltage	100	250	250	Volts
Screen (Grid Number 2) Voltage	100	125	250	Volts
Grid Bias Voltage	-1	-1	-2.5	Volts
Plate Resistance (Approx)	0.25	0.9	>1.0	Megohm
Transconductance	4100	4700	4000	Micromhos
Grid Bias Voltage °	-11.5	-14	-17.5	Volts
Plate Current	8.2	11.8	9.2	Milliamperes
Screen Current	3.2	4.4	3.4	Milliamperes

(For notes see page 2)

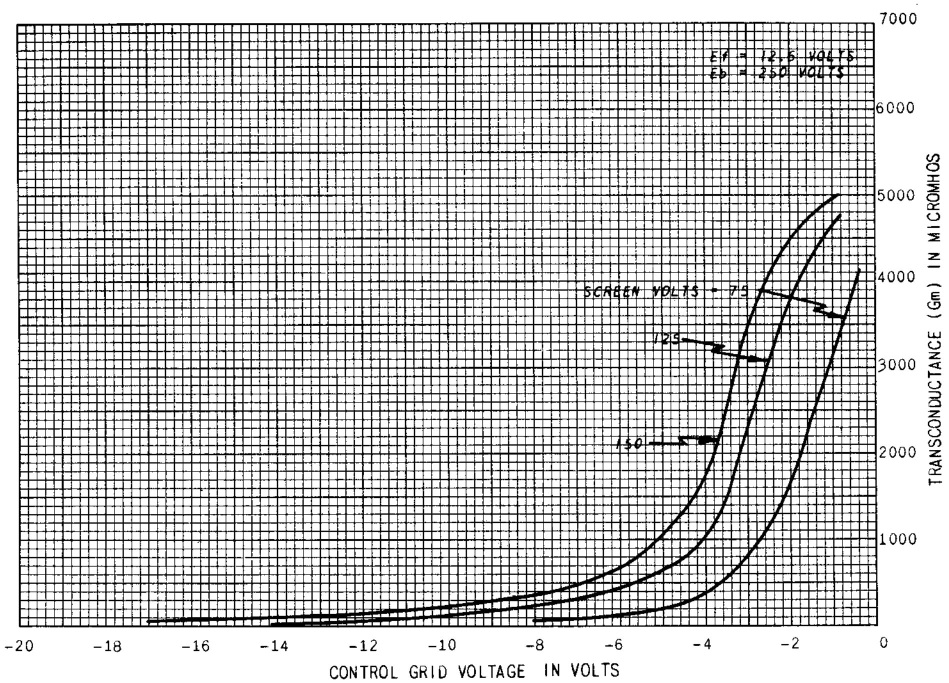
* Measured with shell and internal shield connected.

o Approximate values for transconductance of 40 micromhos.

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



AVERAGE CHARACTERISTICS

